

CLAIMS:

1. A frame assembly for a foldable cycle comprising

5 a rear frame portion including a mounting for a rear wheel;

a forward frame portion, hingedly connecting to said rear frame portion such that the two are foldable towards each other; and

10 hingedly connecting to said forward frame portion, a pivot assembly for a mounting arm, said mounting arm including a mounting for a forward wheel,

wherein the rear frame portion and pivot assembly are coupled such that on folding of the frame portions towards each other hinged movement of said pivot
15 assembly relative to the forward frame portion moves said mounting arm to increase the spacing between the forward frame portion and the forward wheel mounting.

2. A frame assembly according to claim 1, wherein on folding of the frame
20 portions towards each other said spacing between the forward frame portion and forward wheel mounting increases such that the forward and rear wheel mountings may be brought into registration with each other.

3. A frame assembly according to either of claims 1 to 2, wherein the rear
25 frame portion and pivot assembly are coupled by a coupling comprising one or more rigid coupling elements.

4. A frame assembly according to claim 3, wherein the coupling is of
adjustable length.

5. A frame assembly according to claim 4, wherein the coupling is provided with one or more threaded screw adjusters to enable fine adjustment of the length thereof.

5 6. A frame assembly according to any of claims 3 to 5, the coupling is provided with a tensioner for providing tension to said hinged connection between the forward and rear frame portions.

10 7. A frame assembly according to claim 6, wherein said tensioner comprises a resilient element.

8. A frame assembly according to claim 7, wherein said resilient element comprises a spring.

15 9. A frame assembly according to either of claims 7 or 8, wherein said resilient element acts to provide an over centre action.

10. A frame assembly according to any of claims 7 to 9, wherein said resilient element locates within a cavity defined by the coupling.

20 11. A frame assembly according to claim 10, wherein the coupling is provided with a hard sprung piston mechanism comprising an outer sleeve shaped respectively to receive an inner bayonet sleeve and a central piston together with internal spring, wherein the sprung piston mechanism enables
25 travel of the inner bayonet sleeve relative to the outer sleeve which travel is constrained by the action of the spring.

30 12. A frame assembly according to any of claims 3 to 11, additionally comprising a lock for reversibly locking the rear and forward frame portions together in a hinge closed position.

13. A frame assembly according to claim 12, wherein said lock additionally includes a variable length coupling between the rear and forward frame portions.

14. A frame assembly according to claim 13, wherein said variable length coupling co-operates with the coupling on folding of the rear and forward frame portions towards each other.

15. A frame assembly according to any of claims 12 to 14, wherein said lock is arranged to provide an over centre locking action.

16. A frame assembly according to any of claims 1 to 15, wherein any part thereof is provided with a resilient element to achieve an over centre action.

17. A frame assembly according to any of claims 1 to 15, wherein all or of the frame assembly is sprung to achieve an over centre action.

18. A frame assembly according to any of claims 3 to 17, wherein on folding of the frame portions towards each other the coupling acts to push the forward wheel mounting out and around the forward and rear frame portions.

19. A frame assembly according to any of claims 1 to 18, wherein the pivot assembly enables the mounting arm to rotate therein to a position, which readily accommodates folding of the frame portions towards each other.

20. A frame assembly according to any of claims 1 to 19, wherein the rear wheel frame portion is provided with an adjustable mounting for a seat stem.

21. A frame and forward wheel mounting assembly for a foldable cycle comprising

a frame assembly according to any of claims 1 to 20; and

pivotally connecting to said pivot assembly, a mounting arm including a mounting for a forward wheel.

5 22. A foldable cycle comprising the frame and forward wheel mounting assembly according to claim 21; and

attached respectively to said forward and rear wheel mountings, forward and rear wheels;

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attached to the mounting arm, handlebars;

attached to the rear frame portion, a seat stem for receipt of a seat and a drive mechanism for said rear wheel.

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23. A foldable cycle according to claim 22, wherein the forward and rear wheels are of diameter from 60 to 75cm.

24. A frame assembly for a foldable cycle comprising

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a rear frame portion including a mounting for a rear wheel;

a forward frame portion, hingedly connecting to said rear frame portion such that the two are foldable towards each other; and

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hingedly connecting to said forward frame portion, a pivot assembly for a mounting arm, said mounting arm including a mounting for a forward wheel,

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wherein the rear frame portion and pivot assembly are coupled by a coupling that is provided with a tensioner for providing tension to said hinged connection between the forward and rear frame portions.

25. A frame assembly according to claim 24, wherein said tensioner comprises a resilient element.

26. A frame assembly according to claim 25, wherein said resilient element
5 comprises a spring.

27. A frame assembly according to either of claims 25 or 26, wherein said resilient element is arranged to provide an over centre action.

10 28. A frame assembly according to any of claims 25 to 27, wherein said resilient element locates within a cavity defined by the coupling.

29. A frame assembly according to claim 28, wherein the coupling is provided with a hard sprung piston mechanism comprising an outer sleeve
15 shaped respectively to receive an inner bayonet sleeve and a central piston together with internal spring, wherein the sprung piston mechanism enables travel of the inner bayonet sleeve relative to the outer sleeve which travel is constrained by the action of the spring.

20 30. A frame assembly for a foldable cycle comprising

a rear frame portion including a mounting for a rear wheel;

a forward frame portion, hingedly connecting to said rear frame portion such that
25 the two are foldable towards each other; and

a lock for reversibly locking the rear and forward frame portions together in a hinge closed position,

30 wherein said lock is arranged to provide an over centre locking action.